DOCUMENT RESUME

ED 068 669 VT 017 096

AUTHOR	Lasell, Warren L.; And Others
TITLE	An Evaluation System for Vocational Education Leadership and Professional Development Activities. Final Report.
INSTITUTION	Ohio State Univ., Columbus. Center for Vocational and Technical Education.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	72
GRANT	OEG-0-70-1962(725)
NOTE	104p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	Behavioral Objectives; Coordinators; Guidelines; Models; Participant Satisfaction; *Personnel Evaluation; *Program Evaluation; *State Programs; State Surveys; Supervisors; *Vocational Directors; *Vocational Education Teachers

ABSTRACT

This report describes the development of a prototype evaluation model designed to evaluate state personnel development programs in vocational-technical education activities. Components of the evaluation model are presented in seven sections of the report: model overview, state director's manual, state coordinator's manual, state evaluation team manual, survey forms, aid for interpreting data, and guidelines to develop behavioral objectives. The manuals provide procedures for administering the program, making surveys and interpreting data collected, and reporting conclusions and recommendations. A related report is available as VT 016 875 in this issue. (MF)

A FINAL REPORT

An Evaluation System for Vocational Education Leadership and Professional Development Activities

WARREN L. LASELL
RICHARD P. COATNEY
RONALD D. DAUGHERTY

THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION
THE OHIO STATE UNIVERSITY
1900 Kenny Rd., Columbus, Ohio, 43210

MISSION OF THE CENTER

The Center for Vocational and Technical Education, an independent unit on The Ohio State University campus, operates under a grant from the National Center for Educational Research and Development, U.S. Office of Education. It serves a catalytic role in establishing consortia to focus on relevant problems in vocational and technical education. The Center is comprehensive in its commitment and responsibility, multidisciplinary in its approach and interinstitutional in its program.

The Center's mission is to strengthen the capacity of state educational systems to provide effective occupational education programs consistent with individual needs and manpower requirements by:

- Conducting research and development to fill voids in existing knowledge and to develop methods for applying knowledge.
- Programmatic focus on state leadership development, vocational teacher education, curriculum, vocational choice and adjustment.
- Stimulating and strengthening the capacity of other agencies and institutions to create durable solutions to significant problems.
- Providing a national information storage, retrieval and dissemination system for vocational and technical education through the affiliated ERIC Clearinghouse.

ED 068669

A FINAL REPORT

AN EVALUATION SYSTEM FOR VOCATIONAL EDUCATION LEADERSHIP AND PROFESSIONAL DEVELOPMENT ACTIVITIES

Warren L. Lasell
Richard P. Coatney
Ronald D. Daugherty

The Center for Vocational and Technical Education
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

A FINAL REPORT
ON A PROJECT CONDUCTED UNDER
PROJECT NO. 002510
GRANT NO. OEG-0-70-1962 (725)

The material in this publication was prepared pursuant to a grant with the Office of Education, U. S. Department of Health, Education and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official Office of Education position or policy.

U. S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

Office of Education

FOREWORD

The project entitled "An Evaluation System for Vocational Education Leadership and Professional Development Activities" resulted from two generally recognized needs: (1) the need for better trained persons in education and (2) the need for better evaluation of educational programs. New programs funded with money from the 1968 Amendments to the Vocational Education Act are beginning to address the first need, although much still needs to be done. The need for evaluation of education programs generally and of personnel development activities in particular is much more apparent. Little systematic study has been conducted to evaluate in a meaningful way the training of vocational educators. For this reason, the U.S. Office of Education contracted with The Center for Vocational and Technical Education to develop an evaluation model.

This report describes the development of a prototype evaluation model. The Center conducted a pilot test of the evaluation model in a subsequent project funded by the U.S. Office of Education.

The services of the following are recognized in completing the project: Ronald D. Daugherty, project director, and Warren L. Lasell, and Richard P. Coatney.

Appreciation is also extended to consultants who assisted in the development of the conceptual framework of the model and later reacted to a near final draft: Glenn L. Immegart, professor of education, the University of Rochester; Robert R. Lange, assistant professor, Educational Development, The Ohio State University; and John W. Struck, state director of vocational education, Pennsylvania.

Robert E. Taylor
Director
The Center for Vocational
and Technical Education

This document is the final report of the project entitled "An Evaluation System for Vocational Education Leadership and Professional Development Activities." The text of the report is arranged in the format for final reports contained in Appendix A of the Handbook for Directors of projects funded under Parts D and F of the Education Professions Development Act (U.S. Office of Education, January 15, 1972).

1. Restate all of the objectives (anticipated outcomes) as originally stated in the plan of operation or, if applicable, as modified during the operation of the project.

   The initial objectives of the project were to develop a set of systematic procedures which provide information on a regularly scheduled basis:

   a. To the U.S. Office of Education, state departments of education, and institutions of higher education, for making decisions about programs funded under Section 552 of Public Law 90-576

   b. To the U.S. Office of Education and state departments of education for making decisions about programs funded under Section 553 of Public Law 90-576

   c. From which to draw conclusions about program focus and operation

   d. From which to make recommendations for the improvement of programs

Subsequent to completion of the project, USOE project manager, Dr. Lloyd Briggs, modified the original objectives. Following these modifications, the model was designed to evaluate the state personnel development programs activities funded under Section 553 of Public Law 90-576, as well as similar personnel development activities not specifically funded by that section of the act. The model was to provide guidelines only for individual states to conduct the evaluation and to utilize this information for future decisions regarding similar personnel development activities.

2. State the actual outcomes of the project or sub-project and describe the instruments used to measure the outcomes.
The outcome of the project is the evaluation model attached to this report as Appendix A. The outcome of the project was measured by reactions of numerous persons in the field who are involved in personnel development activities and who have expertise in evaluation. They reacted both to the conceptualization of the model and the actual procedures and materials designed to evaluate personnel development programs in the states. Persons who reacted to the model at various stages of development are listed in Appendix B.

3. State the reasons for discrepancies between the anticipated and actual outcomes.
There are no discrepancies between the objectives of the project and the outcome. A model to evaluate state personnel development programs was produced (Appendix A). The model appears to have face validity because of the input and

reactions of some 22 persons from state departments of education and universities. Testing the model was not a part of this grant award. The extent, then, to which the model is actually valid and workable was undetermined at the completion of the project.

4. <u>If plans have been made for follow-up evaluation, indicate the date when additional information will be available.</u> The follow-up evaluation of the model was a pilot test conducted under a separate grant in the spring of 1972. The purpose of the test was to determine how well the evaluation model would work in two states. Information was gathered through the use of observation and interview schedules. This information was used to evaluate the model and to make final revisions in it.

5. <u>State any observations which might be helpful to others considering embarking on a venture such as this one.</u>

   a. The fact that the objectives of the project made its completion difficult. Objectives for a project such as this should be stated clearly and should not be changed during the project.

   b. The practice of soliciting numerous reactions from many persons several times during the project was very helpful in developing a model which was realistic for persons in the field.

6. State any final recommendations which would be useful to the bureau in administering the program under which you received your grant.

The following recommendations are offered to the bureau for assistance in administering the program under which the grant was given.

a. Project objectives should be stated clearly and in considerable detail in the proposal before the project is begun.

b. The branch should require all states to write clear and detailed objectives for their personnel development programs funded by the bureau.

c. Considerable care should be taken to insure that the objectives of a project are not changed during the course of the project.

APPENDICES

APPENDIX A

A Model to Evaluate
Personnel Development in
Vocational-Technical Education

(Draft of Model)

A MODEL TO EVALUATE
PERSONNEL DEVELOPMENT IN
VOCATIONAL-TECHNICAL EDUCATION

Overview

Warren L. Lasell
Richard P. Coatney
Ronald D. Daugherty

Draft for Pilot Test
January 15, 1972

The purposes of this overview are (1) to present factors leading to the development of the evaluation model for state personnel development in vocational education, (2) to describe briefly the model, and (3) to present a rationale for the model.

Factors Leading to the Development of the Model

1. Legislators, government officials, and others increasingly are looking to education to solve many of society's problems, and they recognize the need for improved personnel in order to achieve the solutions. The need for constant updating of knowledge and skills is particularly apparent for vocational educators who must respond continually to changing manpower needs.
2. As a result, recent federal legislation has funded programs to improve professional persons in education generally and in vocational education specifically. The money for vocational education personnel has been used in part to develop special leadership programs leading to a doctorate in vocational education. It has also been used to upgrade professional persons in vocational education through in-serivce projects.
3. Demands for accountability in all educational programs have increased. Educational decision-makers are being called upon to fix the responsibility for every dollar expended.
4. Even though there is increased emphasis upon personnel development and upon accountability, states generally have expended few, if any, resources to evaluate personnel development activities.

These factors have led to the funding of a project to develop a model for the evaluation of state personnel development programs. The model was produced, pilot tested, and revised by The Center for Vocational and Technical Education, The Ohio State University.

Description of the Model

The evaluation model is designed to evaluate state personnel programs and projects funded under section 553 of the Vocational Education Amendments of 1968 and similar projects not funded by that section. In the remainder of this document, "program" will refer to the entire state personnel development program, and "project" will refer to the activities in that program. The following is a description of the components and procedures of the evaluation model.

Components

The model is comprised of seven major components, as follows.

1. Model Overview: This document.
2. State Director's Manual: Provides instructions needed by the state director of vocational education to conduct the evaluation.
3. State Coordinator's Manual: Contains instructions to assist the state coordinator of personnel development in performing his functions for the evaluation.
4. State Evaluation Team Manual: Provides members of the evaluation team with instructions to prepare an evaluation report on the state personnel development program.

5. <u>Survey Forms</u>: Used to gather data from (a) the state coordinator of personnel development, (b) directors of personnel development projects, (c) participants of personnel development projects, and (d) supervisors of personnel development project participants.

6. <u>Aid for Interpreting Data</u>: Presents the format for the arrangement of data collected with the survey forms and also includes questions and instructions designed to assist the state evaluation team in preparing the evaluation report.

7. <u>Guidelines to Develop Behavioral Objectives</u>: Provide assistance to state personnel in writing behavioral objectives for programs and to the state evaluation team in judging performance objectives.

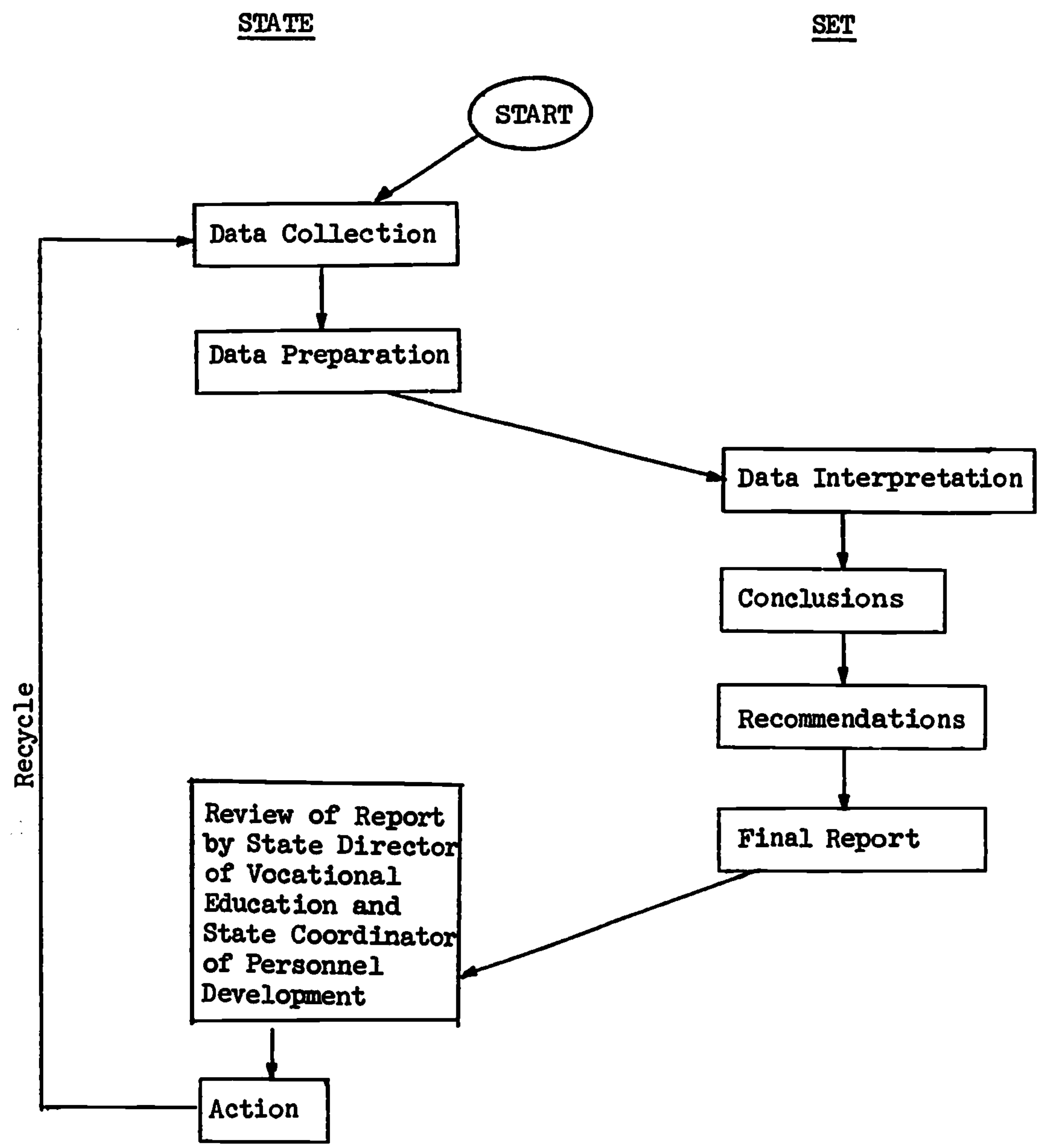
Procedures

The state coordinator of personnel development* (i.e., the person designated to administer the state personnel development program) prepares, distributes, and collects the survey forms. He than arranges the data using the format in the Aid for Interpreting Data (AID). He is provided with a computer program which will organize part of the data for him.

The state coordinator next presents the original survey forms and AID to the state evaluation team. The state director of vocational education has previously selected the team and arranged for its meeting. The team

* Some states use titles such as part F coordinator and state director of personnel development for persons who are responsible for this function.

answers questions about the data and collects any additional data needed. It then draws conclusions, makes recommendations, and finally, prepares the final report. This report is presented to the state director. The director reviews the materials with the state personnel development staff and takes appropriate action. The evaluation process is recycled. The procedures of the evaluation are shown on the flow chart on the next page.


STATE
SET
START
Data Collection
Data Preparation
Data Interpretation
Conclusions
Recommendations
Final Report
Review of Report by State Director of Vocational Education and State Coordinator of Personnel Development
Action
Recycle

Rationale For The Model

Reasons follow for: (1) the use of a state evaluation team, (2) the selection procedures for the state evaluation team, (3) the use of a data format and instructions to assist in interpretation of data, (4) the packaging strategy of the model, and (5) the use of guidelines to develop behavioral objectives.

Use of an Evaluation Team

An evaluation team is included in the design as a means to partially overcome the problem caused by a lack of agreement on what data are needed to evaluate state personnel development activities. Consulted persons in state personnel development programs demonstrated little consensus on data needs. This lack of consensus makes the interpretation of data from individual states particularly difficult. As a compromise intended to serve as many states as possible, data were chosen to address questions related to federal goals for personnel development and several important concerns of state personnel development programs that emerged during the study. The use of an evaluation team, composed of persons competent in several areas and with different perspectives on personnel development, is intended to provide as realistic and valid an interpretation of data as possible.

Selection of the Evaluation Team

The evaluation team should be selected from several different institutional levels and should possess some knowledge of vocational education, personnel development, and the techniques of data interpretation. Several

institutional levels should be represented because both secondary and post-secondary institutions are involved in personnel development. The team members should possess the knowledge to facilitate utilization of the data to prepare an evaluation report.

The state director of vocational education should select members of the evaluation team to insure they are persons who are: (1) knowledgeable in both vocational education and evaluation and (2) legitimate to members of the State Division of Vocational Education.

Data Format and Instructions to Interpret

For three reasons, the state evaluation team will receive information arranged in a specified format with questions and instructions to assist in the interpretation of data. First, the data collected focus upon the federal goals for personnel development in vocational education. Much of the funding for programs to be evaluated with this model comes from federal legislation. Second, the information collected will cause the evaluation team to concentrate upon both state objectives and the degree to which these were attained. Finally, the data and instructions will decrease the possibility that the state evaluation team will write an overly general report which serves no useful purpose.

Packaging of the Model

The model is comprised of several materials which may be packaged in different groups for convenience. That is, persons who need only certain parts of the model may receive only those parts. Those who desire all materials, however, may receive them.

Use of Guidelines to Develop Behavioral Objectives

Guidelines to develop behavioral objectives are included to help those persons working in state personnel development write specific objectives for personnel development programs. Also, the guidelines are included to assist evaluation team members in judging the objectives supplied to the team with data for the evaluation.

A MODEL TO EVALUATE
STATE PERSONNEL DEVELOPMENT
IN VOCATIONAL-TECHNICAL EDUCATION

Manual for the
State Director of Vocational Education

Warren L. Lasell
Richard P. Coatney
Ronald D. Daugherty

Draft for Pilot Test
January 15, 1972

Purpose of the Manual

The purpose of this manual is to provide the State Director of Vocational Education with information needed to participate in the evaluation of the state program for vocational education personnel development. It is assumed that the State Director may want to delegate many of the activities suggested in this manual. The manual, therefore, may be used by his staff. It includes (1) general procedures for the evaluation; (2) definitions; and (3) schedule of activities.

Procedures for the Evaluation

1. The state will obtain components of the evaluation model.
   (a) An overview of the model,
   (b) The manual for the State Director (this manual),
   (c) The manual for the State Coordinator of Personnel Development,
   (d) Survey forms to collect data from four groups of persons,
   (e) The format for presentation of data,
   (f) The manual for the state evaluation team, and
   (g) The guidelines for writing behavioral objectives.

2. The state should collect and process information for the evaluation in accordance with instructions in the manual for the State Coordinator of Personnel Development (M-2).

3. The State Director should select five persons to serve on the state evaluation team. If feasible, it is suggested that two of the members

be from out of state. Members of the team will prepare an evaluation report on state personnel development in vocational education - a job that will take approximately two days.

The State Director should choose no more than one person from each of the following groups: (a) district or secondary administrators or faculty members from a local education agency; (b) the state advisory council for vocational education; (c) faculty members in vocational-technical education from a university or college within the state; (d) faculty members from a university or college within the state (who specialize in research or evaluation); (e) the division of research or evaluation within the state department of education; or (f) administrators or faculty members of vocational-technical education from the community college or technical institute within the state.

4. The State Director of Vocational Education schedules a meeting of the five persons selected to serve on the state evaluation team. The teams should meet with the state coordinator of personnel development, an <u>ex officio</u> member of the team, in facilities provided by the state.

5. Following the meeting of the state evaluation team, the team should submit an evaluation report on the state personnel development program to the State Director of Vocational Education. The report should include recommendations concerning the personnel development program in the state.

Definitions

Participant -- A person who has participated in a project designed to increase his or her effectiveness and efficiency in vocational education. Participants may be teachers, coordinators, administrators, or others involved in personnel development projects.

Personnel Development Program -- All personnel development projects in the state.

Personnel Development Projects -- Components of the state personnel development program. The term project, as used herein, does not designate preservice teacher education, or preservice education for other positions in the field of vocational education. It refers to organized attempts to upgrade professional personnel in vocational education such as those funded under section 553 of the Education Professions Development Act, but it is not limited to those funded under section 553.

Project Director -- The director of a personnel development project, the person in charge of the operation of the project.

State Coordinator of Personnel Development -- The person designated by the State Director of Vocational Education to coordinate or supervise the state personnel development program. The state coordinator is the person most directly responsible for state level personnel development other than preservice education. Several states use different terms for this person, for example, state director of personnel development and Part F Coordinator.

<u>State Evaluation Team</u> -- The five-member group designated by the State Director of Vocational Education to prepare the evaluation report on state personnel development. The team will use data collected with four survey forms and supplied by the state coordinator of personnel development to prepare its report.

<u>Supervisor</u> -- The immediate supervisor of participants of personnel development projects.

<u>Vocational Education</u> -- For the purposes of this evaluation the definition of vocational education in the 1968 Amendments to the Vocational Education Act is used.

A MODEL TO EVALUATE STATE PERSONNEL DEVELOPMENT IN VOCATIONAL-TECHNICAL EDUCATION

Manual for the
State Coordinator of Personnel Development

Warren L. Lasell
Richard P. Coatney
Ronald D. Daugherty

Draft for Pilot Test
January 15, 1972

Purpose of the Manual

The purpose of this manual is to provide instructions to assist the State Coordinator of Personnel Development for Vocational Education in the preparation, distribution, collection, and processing of four survey forms. The forms are: (1) the state program coordinator survey, (2) the project director survey, (3) the participant survey, and (4) the supervisor survey.

Instructions for Preparation, Distribution, and Collection of Data

1. The state coordinator should send the project director survey to directors of personnel development projects. Suggested steps follow.
    a. Make a list of the personnel development projects operating in the year.
    b. Assign a number to each project. Assign 1 to the first project, 2 to the second project, and so forth.
    c. Place the numbers on the project director surveys in the block "For State Use." Place one number on each form.
    d. Check to make sure that each project has the current identifying number on its survey form.
    e. Print the title of the project in the space provided at the top of the first page.

f. Send the project director survey forms to the appropriate project directors, with a cover letter.

g. Also request a prospectus of the project for use by the state evaluation team (see instruction 15). The prospectus should include a summary of the project (without results) and other descriptive information such as the project's length and location, and the number of participants. The prospectus can be one that has been previously prepared.

h. The completed project director survey form and prospectus should be returned to the state coordinator of personnel development.

2. The state coordinator should obtain lists of participants and their supervisors.

   a. Telephone each project director and request an alphabetical list of the participants who began the project, whether they completed it or not, plus their addresses.

   b. Also, request the names and addresses of the immediate supervisors of the participants. To simplify the selection of supervisors later, the name of each supervisor should appear next to the name(s) of participants who work for the supervisor.

3. The state coordinator completes the state program coordinator survey.

4. After receiving the lists of participants and supervisors, the coordinator should determine how many participants will be used from each project.

   a. Record the number of participants in each project.

   b. If the number is over 27, take 20 percent of that number (round off to the nearest whole number if the result is a fraction).

   c. If the number is 27 or under, always select <u>five</u> participants. (If the project has less than five participants, use everyone in the project.)

   d. The numbers obtained in Steps b and c will be the number of participants to be used from each project. An example follows instruction 11.

5. The coordinator determines which participants within each project will be selected.

   a. If there are five or less participants in a project, use all participants.

   b. If there are ten or more participants in a project, do the following.

      (1) Pick at random any name in the list.

      (2) Starting with the name just below it, count down until the fifth name is reached.

(3) Circle this name. It will be the name of the first participant selected.

(4) Then start with the name just below the circled name and again count down until the fifth name is reached.

(5) Circle this name. It will be the name of the second participant selected.

(6) Count down to the next fifth name in the same manner and write it as the third participant selected.

(7) Repeat this process until the required number of names is reached.

(8) When you reach the bottom of the list, continue at the top.

(9) If you come to a name that has already been selected, select the name just below it and continue as before.

c. If there are 6-9 participants in a project, use the same procedure as in b except each name that is selected should be eliminated. Keep eliminating names until the required number of participants remains, five (5).

d. Use this selection procedure for each project. Remember to select five participants for projects of 27 or less, and 20 percent of the participants for projects of 28 or more. An example follows instruction 11.

6. The coordinator should select those supervisors whose employees were selected as participants in step 5.

7. The coordinator assigns numbers to selected participants and supervisors.

   a. Make a list of the sampled participants and their supervisors. (It may also be convenient to put the addresses in this list in order to facilitate mailing surveys to the participants and supervisors.)

   b. Assign a number to each participant. Assign 1 to the first participant, 2 to the second participant, and so forth.

   c. Keep doing this across projects, so that if the number 20 is assigned to the last selected participant of project 3, then 21 is assigned to the first selected participant of project 4. No two participants should have the same number.

   d. Then assign a number to each supervisor in the same manner. Assign 1 to the first supervisor, 2 to the second supervisor, and so forth. Keep doing this across projects. If a supervisor's name appears more than once, always give him the same number. For example, if Mr. P. T. Jones is assigned 2 and then appears further down the list, put another 2 by his name.

   e. The list of selected participants and supervisors, with the assigned numbers, should be kept on file.

8. The coordinator should assign identifying numbers to the participant survey.

    a. Fill out the block at the top of the first page that says "For State Use."

        (1) Next to A, write the project number that was used to identify the project on the project director survey.

        (2) Next to B, write the number of the participant's supervisor.

        (3) Next to C, write the participant's number.

    b. Print the title of the project in the space provided at the top of the first page.

9. The coordinator collates the pages of the supervisor survey.

    a. Take the first page of the form, entitled "Supervisor Survey," and attach it to as many second sheets as there are selected participants who work for a supervisor. (Each second sheet refers to a participant.)

    b. If a supervisor has only one employee who was selected as a participant, attach only one second sheet.

10. The coordinator assigns identifying numbers to the supervisor survey.

    a. At the top of the first page, under "For State Use," write the supervisor number next to B.

b. At the top of the second page, under "For State Use," write the number of the participant's project next to A and write the participant number next to C.

c. Also at the top of the second page, print the name of the participant and the title of his project.

d. Do b and c for each second page of the Supervisor Survey Form.

11. The coordinator mails the Participant Survey, and the visor Survey to the appropriate people, with a cover letter. A follow-up letter or call may be used to assure a high percentage of returns. Be sure to include a stamped self-addressed envelope to those in the sample and to specify the exact project to which they are responding. All the forms should be returned at a time determined by the state coordinator and his staff.

Example of Determining the Number of Participants to be Selected From Each Project

Suppose State Y has a total of 106 participants in five projects. The procedure of determining the number in each project to be selected is illustrated in the table below.

Project	Number	Number Selected
1.	22	5
2.	6	5
3.	42	8 (20% of 42, rounded off)
4.	3	3
5.	33	7 (20% of 33, rounded off)
	106	

Example of Selecting Participants From Each Project

On the next page are two projects, one with nine participants and the other with fifteen. Both projects should have five selected (they both have less than 28 participants). For the project with nine participants, names are eliminated as illustrated until the required number is reached. For the project with fifteen participants, names are selected as illustrated until the required number is reached.

Example: Selection of Five Participants
from a Project with Nine Participants

<u>Project 1</u>

(Start): Random Selection of any name in the list

2.	3.			Barter, Samuel	
3.	4.		(Start)	Barton, Harriet	
4.	5.	1.		Earl, Linda	2nd elimination
5.	1.	2.		Granger, Daniel	4th elimination
	2.	3.		Lerner, Robert	
	3.	4.		Pratt, John	
	4.	5.		Riley, Eileen	1st elimination
	5.	1.		Slade, Karen	3rd elimination
	1.	2.		Voss, Kenneth	

Example: Selection of 5 Participants
from a Project with 15 Participants

(Start): Random Selection of any name on the list

			Project 4	
1.	2.		Adams, Carolyn	
2.	3.		Crawford, William	
3.	4.		Dram, Henry	
4.	5.		Hanson, Burt	2nd name selected
5.	1.		Holson, Teresa	5th name selected
	2.		Karl, Thomas	
	3.		Munn, Nancy	
	4.		Neilson, Anne	
	5.	(Start)	Paulson, William	3rd name selected
	1.	1.	Pliny, Curtis	
	2.	2.	Plotter, Allan	
	3.	3.	Richter, Warren	
	4.	4.	Samuels, Richard	
	5.*	5.	Sawyer, Kenneth	1st name selected
		1.	Talbert, Diane	4th name selected

* Since this name, Kenneth Sawyer, was already chosen, choose the name just below it, Diane Talbert.

Instructions for Data Processing

12. When the state coordinator has received the survey forms, he should divide them by project and place them in folders.
    a. Each folder should contain one project director survey form and all the participant and supervisor survey forms that relate to the project.
    b. Only one form will remain, the state coordinator survey form.

13. The coordinator should place the information from all the survey forms into the Format for Presentation of Data.
    a. Place the objectives section of the state coordinator form in section A of the Format. Either replace A-1 and A-2 with the sheets on objectives or take out the objectives information and place it in A-1 and A-2.
    b. Place the information from the participant and supervisor survey forms in the section of the Format designated with the letter B.
        (1) If the computer program is used, put the information on cards according to the instructions with the program. The output will give the tables in B-1 through B-15. Then go to the comments in instruction 9.

(2) If the computer program is not used, follow instructions 3-8, then go to instruction 9.

(3) Take a participant form and fill in Tables 1-7 and the first table on page B-15. Repeat this process for each participant form (for Table 7, refer to the supervisor form to see at which level the participant responses should be placed).

(4) Take a supervisor form and fill in Tables 8-14 and the second table under additional information. Repeat this process for each supervisor form.

(5) For Tables 1-4 and 8-12, refer to the project director survey for information on project size and duration.

(6) In placing the data in B-1 through B-15, keep a tally of the responses in each cell. You can then change the tally marks into numbers and use numbers, or you can convert the numbers to percentages.

(7) <u>Individual projects</u>: If you want one or more tables to show the data for individual projects as well as the data summed over projects, make as many copies of each table as there are projects. Then, as you go through a folder, fill in one of the copies. For each folder, fill in a copy. While doing this, also fill in the original table which shows all of the

responses. (For individual projects, only fill in the top line of Tables 1-4 and 8-12.) Place the individual project information in a separate folder, organized by project. Do not place this information in the Aid for Interpreting Data.

(8) For states with few projects: The lines on project size and project duration could be used for individual projects. For example, if the state has only one project with 1-10 participants, fill out that line under project size and you will have individual project information. If all projects are of the same size, you can put them on separate lines under project size and cross out the project size description in the table. Project size information would be of no use anyway. These tables (Tables 1-4 and 8-12) may be changed in any way that best presents the data.

(9) Comments: Tear out the third sheet of all the participant survey and the second sheet(s) of all the supervisor surveys. Place these participant comments and supervisor comments in the folder that contains individual project data. All of this information should be organized by project.

c. Place the first three pages of the state coordinator survey (that dealing with needs) in pages designated as C in the Format (C-1 through C-3). Either replace C-1, C-2, and C-3 with the three sheets on needs or take out the needs information and place it in C-1, C-2, and C-3.

d. Place the last two pages of the state coordinator survey (that dealing with selection of projects) in D of the Format (D-1 through D-3). Either replace D-1, D-2, and D-3 with the two sheets on project selection or take out the needs information and place it in D-1, D-2, and D-3.

e. Additional Information: Place the last sheet of the project director survey, the first sheet of each supervisor survey, the state plan, and any other information you want to include in a separate folder.

14. When the information has been placed in the Format, the state coordinator should number the pages in the upper right-hand corner for easy reference. When the state evaluation team meets, give each member a copy of (1) the folder with the Format, with data, and the computer output, if any; (2) the folder with project information and participant and supervisor comments for each project; and (3) the folder with additional information. States that use the computer may, if desired, simply attach the data referring to sections A, C, and D to the computer output and place this information in a folder (number one above).

15. Before the team meets, the coordinator should send members the following materials: (1) the overview of the evaluation model; (2) the manual for the state evaluation team; (3) a copy of the Format for Presentation of Data, with no data; (4) a prospectus of each project to be evaluated (see instruction 1g on page 2 of this manual); and (5) a co.er letter. The cover letter should state the purpose of the meeting, the schedule of activities, the expected outcomes, and a brief description of the enclosures.

For State Use
A ________
B ________
C ________

Vocational Education Personnel Development

PARTICIPANT SURVEY

This survey form applies to the most recent personnel development project in which you participated. Your responses will be used by the state as one indicator of how beneficial personnel development projects (such as inservice training) are to professionals throughout the state. Do not put your name on this form.

Project Title ______________________________

Please check or complete the following:

I. BACKGROUND DATA

1. Age ________

2. Sex: ____ Male
   ____ Female

3. Ethnic Identification (Optional)
   _____ American Indian
   _____ Black
   _____ Caucasian
   _____ Mexican American
   _____ Oriental
   _____ Other (Specify)
   ____

4. Education:
   _____ No Degree
   _____ Associate Degree
   _____ Baccalaureate Degree
   _____ Masters Degree
   _____ Doctorate Degree
   _____ Others (Specify)
   ____

5. Service Area:

	Areas in Which Training Received	Areas in Which Presently Working
Agriculture		
Business Education		
Distributive Education		
Guidance		
Home Economics		
Technical Education		
Trade and Industry		
Others (Specify)		

II. PROJECT DESCRIPTION

1. In how many special Vocational Personnel Development Projects or activities have you participated? ______________________________

(D-4)

Please respond to the remaining items with reference to the most recent personnel development project in which you participated.

2. State what you perceived to be the purpose of the project.

3. Did you complete the project? ____ Yes
If no, why not? ____ No

4. In which type of project or activity did you participate?
____ Preservice Activity
____ Inservice Activity

5. How long did the project last?
____ Less than a week
____ One to less than two weeks
____ Two to four weeks
____ More than four weeks

Give length of project if more than four weeks: ________

III. PERCEPTION OF PROJECT

Respond to the following dimensions as they apply to the most recent personnel development project in which you participated.

1. Please check appropriately:

Instructional Activities	Very Worthwhile	Fairly Worthwhile	Not Very Worthwhile	Waste of Time	Does not Apply	Not Available but Needed
a. Buest lecturers and speakers						
b. Use of visual aids						
c. Class discussions						
d. Textbooks and reading materials						
e. Actual or simulated work experiences related to your job						
f. Others (Please specify)						

2. How worthwhile was the project for you? Comment

____ Very worthwhile
____ Fairly worthwhile
____ Not very worthwhile
____ Waste of time

3. What was most relevant about the project?

4. What was least relevant about the project?

5. Did the project apply to your work? How?

____ Yes
____ Partly
____ No

6. How well organized was the project? Comment

____ Very well organized
____ Fairly well organized
____ Not very well organized
____ Poorly organized

7. Would you recommend this project to someone else? If no, why not?

____ Yes
____ No

8. What Vocational and Technical Education Personnel Development Projects would you like to see conducted?

9. Give name and address of employer or immediate supervisor.

IV. ADDITIONAL COMMENTS

For State Use
A ________

Vocational Education Personnel Development

PROJECT DIRECTOR SURVEY

This survey form applies to the most recent personnel development project you have directed. Your responses will be used by the state as one indicator of how beneficial personnel development projects (such as inservice training) are to professionals throughout the state.

Please check or complete the following:

I. BACKGROUND DATA

_____ No Degree
_____ Associate Degree
_____ Baccalaureate Degree
_____ Master's Degree
_____ Doctorate Degree
_____ Others (Specify)

____

2. Was the position of project director a full-time or part-time assignment?

_____ Full-time
_____ Part-time

II. PROJECT DESCRIPTION

1. State title of project:

2. At what level was the request for the proposal initiated?

_____ Federal
_____ State
_____ Local
_____ Other (Specify) ______________________________

3. Who had the primary responsibility to develop the proposal?

____
(name) (position or title)

4. What was the duration of the project?

_____ Less than a week
_____ One to less than two weeks
_____ Two to four weeks
_____ More than four weeks

If more than four weeks, give length of project ____________________

5. What was the total amount budgeted for the project? $ ____________

6. What percent of the total project budget was allocated for evaluation?

____________________ %

7. What percent of the total project budget was received from each of the following sources?

Federal Funds ____________________ %
State Funds ____________________ %
Local Funds ____________________ %

8. What instructional materials or methods were used which provided job-like experiences for participants? (e.g., simulated and actual classroom experience work in business and industry, etc.)?

9. List below the educational agencies or units other than the State Division of Vocational Education that provided support for this personnel development project. Give the type of activities performed by these agencies or units.

Educational Agencies of Units	Type of Activity

10. What Vocational and Technical Education Personnel Development Project would you like to see conducted?

11. Please list below each stated objective of the personnel development project and give evidence of attainment. If the evidence is in a document, please reference the document and attach a copy of it to this instrument. If there are more than three objectives, attach additional sheet.

Objective 1.

Evidence of attainment:

Objective 2.

Evidence of attainment:

Objective 3.

Evidence of attainment:

12. ADDITIONAL COMMENTS

For State Use

B ________

Vocational Education Personnel Development

SUPERVISOR SURVEY

This survey form applies to the personnel development project(s) in which one or more of your employees recently participated. Please complete the first page of the form only once. Complete a second page for each of your employees who were in personnel development projects (at the top of each second page is the name of your employee). Your responses will be used by the state as one indicator of how beneficial personnel development projects (such as inservice training) are to professionals throughout the state. Do not put your name on this form.

Please check or complete the following:

I. DESCRIPTIVE INFORMATION

1. What is your title? ______________________________

2. With which of the following agencies are you associated?
   _____ College or University
   _____ Community College or Technical Institute
   _____ Intermediate School District
   _____ Local School District
   _____ State Department
   _____ Others (Specify) ______________________________

3. Local School District: (Complete if you are associated with)
   a. Size of school district:
      _____ Less than 10,000 pupils
      _____ 10,000 - 20,000 pupils
      _____ 20,001 - 50,000 pupils
      _____ More than 50,000 pupils

   b. Average family income for total school district population:
      _____ Less than $3,000
      _____ $3,000 - $6,000
      _____ $6,001 - $10,000
      _____ $10,001 - $15,000
      _____ $15,001 - $20,000
      _____ More than $20,000

   c. What percent of the schools in the district are actually receiving Title I funds? ____________%

   d. What percent of the student body is receiving ADC? ____________%

4. If you are associated with a College or University, a Community College or Technical Institute, what percent of the student body is receiving financial aid? ____________%

II. VOCATIONAL DEVELOPMENT NEEDS

What Vocational and Technical Education Personnel Development Projects would you like to see conducted? (Attach sheet if space is needed.)

For State Use
A ______
B ______

Employee's (Participant's) Name ______________________________

Project Title ______________________________

III. PERCEPTION OF PROJECT

1. Did the project apply to participant's work?

   ____ Yes
   ____ Partly
   ____ No

2. Has there been a noticeable improvement in the job performance of participant after participating in the project? If so, how has he improved?

   ____ Great improvement
   ____ Some improvement
   ____ No improvement

3. Would you encourage other employees of your agency to participate in a similar project? Please explain.

   ____ Yes
   ____ No

4. Has participant shared his experiences with you, his immediate supervisor?

   ____ Yes
   ____ No

5. Has participant shared his experiences with other employees with whom he works?

   ____ Yes
   ____ No
   ____ Do not know

6. What provisions were made for participant to share his experiences?

   ____ Group seminars
   ____ Newsletters
   ____ Informal discussions
   ____ Others (Specify)

IV. ADDITIONAL COMMENTS

Vocational Education Personnel Development

STATE PROGRAM COORDINATOR SURVEY

I. DETERMINATION OF PERSONNEL DEVELOPMENT NEEDS.

Please complete the following table by ranking the means of determining personnel development needs in order of importance (1 being most important). The means of determining needs are lettered A through E (A is consultation, E is other).

Order of Importance	Means of Determining Needs	
______	Consultant with persons in the agencies listed. Circle appropriate letters. a. Local Education Agencies b. State Education Agencies c. Universities d. Community Agencies e. Business and Industrial Organizations f. Labor Organizations g. State Personnel Directors h. State Advisory Council for Vocational Education i. Other (Specify)	With Whom Consulted (Title and/or Functions)
______	Review of personnel development literature List Sources:	
______	Needs generated by previous and/or ongoing projects within your State. List Projects:	
______	Your own observation and/or experience. Explain:	
______	Other (Specify). ______________________________	

(D-2)

II. NEEDS AND PRIORITIES

The personnel development program under your direction consists of projects and activities designed to address specific needs.

DIRECTIONS:

A. In Section I of the chart below, please list the stated personnel development needs in order of priority. (See example of a need below).

B. Section II consists of numerous criteria usually considered in setting the priority of needs. For each need listed in Section 1, rank in order of importance the criteria having the greatest influence in establishing its priority, (1 being the most important). See example below.

C. Check appropriately, Section III, if adequate resources are available to conduct projects and/or activities designed to address the stated need.

NOTE: If additional space is required, continue on page 2a.

SECTION I	SECTION II							SECTION III	
Personnel Development Needs Listed in Order of Priority	Criteria for Setting Criteria							Adequate Resources	
	Resources (Financial, Personnel)	Opinions of State Voc. Ed. Personnel	Public Policy (Federal, State)	Existing or Projected Shortage of Personnel	Advice of State Advisory Council	Manager Ability	Other Sources (Specify)	Yes	No
Inservice Training for 50 Local School Voc. & Tech. Education Curriculum Specialists		5	1	4		2	Local School Supt. 3		

SECTION I	SECTION II							SECTION III	
Personnel Development Needs Listed in Order of Priority	Criteria for Setting Priority							Adequate Resources	
	Resources (Financial, Personnel)	Opinions of State Voc. Ed. Personnel	Public Policy (Federal, State)	Existing or Projected Shortage of Personnel	Advice of State Advisory Council	Other Sources (Specify)	Manager Ability	Yes	No

D. Because of various constraints, for example, lack of available resources, state regulations etc., certain needs may be reduced in priority. State the reduced priority needs and those constraints which keep the priority low.

III. OBJECTIVES OF PERSONNEL DEVELOPMENT PROGRAM

A. Personnel Development Programs are designed to meet a number of specified objectives. Please list the objectives of the Personnel Development Program in your state. For each objective, present the evidence of accomplishment for that objective. If the evidence is in a document, please reference the document and attach a copy of it to this instrument. Attach additional sheets if necessary.

B. Are there projects which do not address program objectives?

_______ Yes

_______ No

If Yes, give nature of project(s) and basis of its priority.

IV. RESPONSIBILITY FOR PERSONNEL DEVELOPMENT IN STATE

Give name and title of the following:

1. Persons directly responsible for personnel development program in state.

____
(Title)

2. Person who has control of the allocation of funds for vocational education personnel development in the state.

____
(Title)

3. If 1 and 2 are different people, is there a resulting difficulty in funding personnel development projects in the state?

☐ YES ☐ NO

Please explain:

V. PROCEDURES FOR SOLICITING PROPOSALS

A. What percentage of the proposals for projects designed to meet the program objectives were from the following organizations or agencies:

Agencies	Percent of Total Proposals Solicited	Percent of Total Proposals Submitted	Percent of Total Proposals Funded
Universities			
Local education agencies			
Community or junior college			
Private R & D agencies			
State education agencies			
Other (Specify)			

B. List the steps used to review proposals for Personnel Development Projects.

Steps in the Review	People Involved (Title and/or Function)

C. What person or group by title or function, makes the final decision to fund a given personnel development project?

VI. CRITERIA FOR SCREENING PROPOSALS

Check the criteria used over the total process of screening proposals (Section II) and rank in orderof importance (Section III) (1 being the most important).

NOTE: If criteria varies by program objectives, reproduce chart for each objective.

SECTION I	SECTION II	SECTION III
Screening Criteria	Criteria Used	Rank
Relationship to state program objectives		
Estimated cost of proposal project		
Number of students (participants) involved		
Students (from participant's school or agency for whom the project is aimed		
Past record of institution or agency (success with previous projects)		
Proposed project duration		
Feasibility of projects		
Ability and availability of personnel		
Other criteria used (Specify)		

VII. EXPENDITURE OF RESOURCES

A. What was the total cost of the program? ____________________

B. What were the administrative costs of the program? ____________

C. What percent of the total program budget was allocated for evaluation? ______________

D. List below the educational agencies or units other than the State Division of Vocational Education that provided support for the personnel development effort within your state. Give types of activities performed by the agency or unit.

Educational Agency or Unit	Type of Activity Performed

VIII. ADDITIONAL COMMENTS:

A MODEL TO EVALUATE PERSONNEL DEVELOPMENT IN VOCATIONAL-TECHNICAL EDUCATION

Manual for the
State Evaluation Team

Warren L. Lasell
Richard P. Coatney
Ronald D. Daugherty

Draft for Pilot Test
January 15, 1972

The purpose of this manual is to assist members of the state evaluation team in evaluating their state's personnel development program in vocational-technical education. It provides guidelines and/or instructions for: (1) planning the state evaluation team meeting and (2) preparing an evaluation report on the state personnel development program for the state director of vocational education. The manual should be used with the Aid for Interpreting Data (AID) to assist the state evaluation team in preparing an evaluation report.

Guidelines and Instructions

The state director of vocational education should select the five members of the state evaluation team (SET) and schedule the initial meeting of members and the state coordinator of personnel development (an *ex officio* member). Suggested instructions follow for planning the meeting and preparing a report.

1. Plan the team meeting. The following steps are suggested as possible planning functions for the team.

   a. Determine the nature and scope of the team's job. The team may use the overview of the evaluation model, this manual, and other documents provided by the state coordinator of personnel development to gain a better understanding of the necessary functions of the evaluation team.

b. Determine the resources and time available to perform the evaluation of the state personnel development program. Although team members may request more information from the state coordinator of personnel development, they should receive from him as a minimum:

(1) The overview of the model,

(2) The aid for interpreting data [AID will have information supplied from the four survey forms listed below in (3) through (6)],

(3) The state coordinator survey,

(4) The project director survey,

(5) The participant survey, and

(6) The supervisor survey.

c. Determine additional information needed. The team may want additional data to evaluate the state personnel development program. For example, the questions from AID which are designed to assist team members may suggest the need for additional data which could be found in the state plan for vocational education.

d. Organize the team for the evaluation. The team should designate a chairman to moderate meetings and to present the evaluation report to the state director of vocational education. Members should also make any other organizational arrangements they feel will facilitate the evaluation.

2. Prepare the evaluation report.

   a. Make sure that each SET member has:

      (1) Aid for Interpreting Data which includes questions to assist the team in preparing an evaluation report,

      (2) Data collected with: (a) the state coordinator survey, (b) the project director survey, (c) the participant survey, and (d) the supervisor survey (presented in the format of AID), and

      (3) Other data which members of the state evaluation team feel are necessary to answer the questions included with the classification scheme or to prepare a report. (The additional data would be supplied by the state coordinator of personnel development).

   b. Use the analysis questions and data to write the evaluation report.

   c. The report should include:

      (1) An introduction which cites the purpose of the evaluation report and provides background of the report,

      (2) A main body of the report which contains:

         (a) Questions examined by the state evaluation team,

         (b) Information presented to answer the questions, and

         (c) A discussion of the information;

      (3) A summary of the findings and conclusions of the evaluation team,

      (4) Recommendations of the team.

A MODEL TO EVALUATE
PERSONNEL DEVELOPMENT IN
VOCATIONAL-TECHNICAL EDUCATION

Aid for Interpreting Data

Warren L. Lasell
Richard P. Coatney
Ronald D. Daugherty

Draft for Pilot Test
January 15, 1972

The purpose of the Aid for Interpreting Data (AID) is to present information to members of the state evaluation team (SET) in a systematic way. AID is an outline, the first section of which consists of major topics, survey items, and information. Its second section is made up of questions designed to assist in the interpretation of the information.

Four main topics, developed as a result of the study of state and federal vocational personnel development programs, are presented in the first section of AID. These are: (A) Program Objectives, (B) Participant and Supervisor Opinions, (C) Personnel Development Needs, and (D) Selection of Projects. Under each of the four topics, items from survey forms and information related to the item are presented. In some cases the information is a direct response to the item by respondents; in others, the information is an analysis of data, such as a table with data from several survey items.

Pages in the first section are designated with the letters next to the topics in the above paragraph; that is, Program Objectives are designated as A, Participant and Supervisor Opinions, B, and so forth. They are numbered from 1 through the number needed. For example, materials under Program Objectives are designated A-1 and A-2.

The second section of AID presents questions and directions designed to assist team members in interpreting data collected with the survey forms. Questions are written on perforated pages and are referenced to pages in the first section which have information to which the questions relate. Individual pages from Section II may be removed and placed next to information in Section I to facilitate the interpretation of data.

Caution

Interpretations of the data must be made carefully. Data are indicators only and, by themselves, prove nothing. Therefore, SET members should look for trends and attempt to relate different pieces of information.

I. SURVEY ITEMS AND INFORMATION

Objectives of the State Program

Survey Item:

Personnel Development Programs are designed to meet a number of specified objectives. Please list the objectives of the Personnel Development Program in your state. For each objective, present the evidence of accomplishment for that objective. If the evidence is in a document, please reference the document and attach a copy of it to this instrument. Attach additional sheets if necessary.

Information:

Survey Item:

Are there projects which do not address program objectives?

______ Yes

______ No

If Yes, give nature of project(s) and basis of the priority.

Information:

Participant and Supervisor Opinions of Programs

This section includes 14 tables and two questions asked of participants. Information in the tables comes from several survey items. <u>No survey items per se, therefore, are on listed pages with tables</u>. All 14 tables are listed under one heading for information. The next heading designating a survey item does not appear again until page B-16.

When interpreting information in the tables, team members should pay particular attention to the number of responses and non-responses. <u>A small number of responses or, conversely, a large number of non-responses requires caution</u>. In either case extreme caution should be taken before generalizations are made.

TABLE 1

Information:

Participant Reaction to "How Worthwhile Was the Project?":
Over All Projects, By Project Size
and By Project Duration

Projects		How Worthwhile Was the Project?					Participants	
		Very	Fairly	Not Very	Waste of Time	No Response	Number	%
All Projects								100
Project Size (by number of partici-pants)	1-10							
	11-20							
	21-30							
	Over 30							
Project Duration (in weeks)	Less than 1							
	1 less than 2							
	2-4							
	More than 4							

TABLE 2

Participant Reaction to "Did the Project Apply to Work?": Over All Projects, By Project Size and By Project Duration

Projects		Did the Project Apply to Work?			Participants	
		Yes	No	Not Responding	Number	%
All Projects						100
Project Size (by number of participants)	1-10					
	11-20					
	21-30					
	Over 30					
Project Duration (in weeks)	Less than 1					
	1 less than 2					
	2-4					

TABLE 3

Participant Reaction to "How Well Organized Was the Project?": Over All Projects, By Project Size and By Project Duration

Projects		How Well Organized Was the Project?					Participants	
		Very Well	Fairly Well	Not Very Well	Poorly	Not Responding	Number	%
All Projects								100
Project Size (by number of partici-pants)	1-10							
	11-20							
	21-30							
	Over 30							
Project Duration (in weeks)	Less than 1							
	1 less than 2							
	2-4							
	More than 4							

TABLE 4

Participant Reaction to "Would Participant Recommend Project to Someone Else?": Over All Projects, By Project Size, and By Project Duration

Projects		Would Participant Recommend Project to Someone Else?			Participants	
		Yes	No	Not Responding	Number	%
All Projects						100
Project Size (by number of partici- pants)	1-10					
	11-20					
	21-30					
	Over 30					
Project Duration (in weeks)	Less than 1					
	1 less than 2					
	2-4					

Table 5

Participant Ratings of Instructional Activities (Summed over Projects)

Instructional Activities	How Worthwhile Were the Instructional Activities?						
	Very	Fairly	Not Very	Waste of Time	Does Not Apply	Not Available But Needed	No Response
Guest lecturers and speakers							
Use of visual aids							
Class discussions							
Textbooks and reading materials							
Actual or simulated work experiences related to job							
OTHER							

Table 6

Participant Reaction to "How Worthwhile Was the Project?"
and "Did the Project Apply to Work?"
By Age, Sex, and Ethnic Group

Group Characteristic		How Worthwhile Was the Project?					Did the Project Apply to Work?			Participants	
		Very	Fairly	Not Very	Waste of Time	No Response	Yes	No	No Response	#	%
Age	20-29										
	30-39										
	40-49										
	50 & over										
Sex	Male										
	Female										
Ethnic Group	American Indian										
	Black										
	Caucasian										
	Mexican American										
	Oriental										
	OTHER										
	OTHER										
	OTHER										
	Participants who did not identify their ethnic group										

TABLE 7

Participant Reaction to "How Worthwhile was the Project?" and "Did Project Apply to Work?" By Three Economic Measures of LEA of Participants

Economic Measure		How Worthwhile was the Project?					Did Project Apply to Work?			Participants	
		Very	Fairly	Not Very	Waste of Time	No Response	Yes	No	No Response	#	%
Average Family Income	More than $20,000										
	$15,001-20,00										
	$10,001-15,000										
	$ 6,001-10,000										
	$ 3,000- 6,000										
	Less than $ 3,000										
Percentage of Schools Receiving Title Funds	0-10%										
	11-20%										
	21-30%										
	31-40%										
	Over 40%										
Percentage of Student Body Receiving ADC Payments	0-10%										
	11-20%										
	21-30%										
	31-40%										
	Over 40%										

TABLE 8

Supervisor Reaction to "Did Supervisor Feel Project Applied to Participant's Work?" : Over all Projects, by Project Size, and by Project Duration

Projects		Did Supervisor feel Project Applied to Participant's Work				Supervisors	
		Yes	Partly	No	No Response	#	%
All Projects							100
Project Size (by number of Participants)	1-10						
	11-20						
	21-30						
	Over 30						
Project Duration (in weeks)	Less than 1						
	1-less than 2						
	2-4						
	More than 4						

TABLE 9

Supervisor Reaction to "Has there been Improvement in Performance of Participants?": Over all Projects, by Project Size, and by Project Duration

Projects		Has there been Improvement in Performance of Participants? Great	Some	No	No Response	Supervisors #	%
All Projects							100
Project Size (by number of participants)	1-10						
	11-20						
	21-30						
	Over 30						
Project Duration (in weeks)	Less than 1						
	1-less than 2						
	2-4						
	More than 4						

TABLE 10

Supervisor Reaction to "Has Supervisor Encouraged Other Employees to Participate in Similar Projects?": Over all Projects, by Project Size, and by Project Duration

Projects		Has Supervisor Encouraged Other Employees to Participate in Similar Projects?			Supervisors	
		Yes	No	No Response	#	%
All Projects						100
Project Size (by number of participants)	1-10					
	11-20					
	21-30					
	Over 30					
Project Duration (in weeks)	Less than 1					
	1 less than 2					
	2-4					
	More than 4					

TABLE 11

Supervisor Reaction to "Has Participant Shared his Experiences with You, his Immediate Supervisor?": Over all Projects, by Project Size, and by Project Duration

Projects		Has Participant shared Experience with Supervisor? Yes	No	No Response	Supervisors #	%
All Projects						100
Project Size (by number of participants)	1-10					
	11-20					
	21-30					
	Over 30					
Project Duration (in weeks)	Less than 1					
	1 less than 2					
	2-4					
	More than 4					

TABLE 12

Supervisor Reaction to "Has Participant Shared Experiences With Other Employees?": Over All Projects, By Project Size and By Project Duration

Projects		Has Participant Shared Experiences with Other Employees			Supervisors	
		Yes	No	No Response	Number	%
All Projects						100
Project Size (by number of participants)	1-10					
	11-20					
	21-30					
	Over 30					
Project Duration (in weeks)	Less than than 1					
	1 less than 2					
	2-4					
	More than 4					

Supervisor Reaction to "Did Project Apply to Participant's Work?"
and "Has There Been Improvement in Performance of Participant?"
By Three Economic Measures of LEA of Participants

Economic Measures		Did Project Apply to Participant's Work?				Has There Been Improvement in Performance of Participant?				Supervisors	
		Yes	Partly	No	No Response	Great	Some	No	No Response	#	%
Average Family Income	More than $20,000										
	$15,001-20,000										
	$10,001-15,000										
	$6,001-10,000										
	$3,000-6,000										
	Less than $3,000										
Percentage of Schools Receiving Title I Funds	0-10%										
	11-20%										
	21-30%										
	31-40%										
	Over 40%										
Percentage of Student Body Receiving ADC Payments	0-10%										
	11-20%										
	21-30%										
	31-40%										
	Over 40%										

TABLE 14

Supervisor Reactions to "Did Project Apply to Participant's Work?" and "Has there been Improvement in Performance of Participant?" by Size of LEA and Educational Agency Supervisors

Size of LEA and Educational Agency		Did Project Apply to Participant's Work?				Has there been Improvement in Performance of Participants?				Supervisors	
		Yes	Partly	No	No Response	Great	Some	No	No Response	#	%
Size of LEA pupils	Less than 10,000										
	10,001-20,000										
	20,001-50,000										
	More than 50,000										
Educational Agency of Supervisors	College or University										
	Community College or Technical Institute										
	Intermediate School District										
	Local School District										
	State Department of Education										
	Other										

B-15

Survey Item:

What was most relevant about the project?

Information:

Survey Item:

What was least relevant about the project?

Information:

Personnel Development Needs

<u>Survey Item with Information</u>

Please complete the following table by ranking the means of determining personnel development needs in order of importance (1 being most important). The means of determining needs are lettered A through E (A is consultation, E is other).

Order of Importance	Means of Determining Needs	
A. ________	Consultant with persons in the agencies listed. Circle appropriate letters. a. Local Education Agencies b. State Education Agencies c. Universities d. Community Agencies e. Business & Industrial Organizations f. Labor Organizations g. State Personnel Directors h. State Advisory Council for Vocational Education i. Other (Specify)	With Whom Consulted (Title and/or Functions)
B. ________	Review of personnel development literature List Sources:	
C. ________	Needs generated by previous and/or ongoing projects within your State. List Projects:	
D. ________	Your own observation and/or experience. Explain:	
E. ________	Other (Specify). ________________________________	

Survey Item and Information

DIRECTIONS:

A. In Section I of the chart below, please list the stated personnel development needs in order of priority. (See example of a need below).

B. Section II consists of numerous criteria usually considered in setting the priority of needs. For each need listed in Section I, rank in order of importance the criteria having the greatest influence in establishing its priority, (1 being the most important). See example below.

C. Check appropriately, Section III, if adequate resources are available to conduct projects and/or activities designed to address the stated need.

SECTION I	SECTION II							SECTION III	
	Criteria for Setting Priority							Adequate Resources	
Personnel Development Needs Listed in Order of Priority	Resources (Financial, Personnel)	Opinions of State Voc. Ed. Personnel	Public Policy (Federal, State)	Existing or Projected Shortage of Personnel	Advice of State Advisory Council	Manageability	Other Sources (Specify)	Yes	No
Inservice Training for 50 Local School Voc. & Tech. Education Curriculum Specialists		5	1	4		2	Local School Supt. 3	✓	

Survey Item

Because of various constraints, for example, lack of available resources, state regulations, etc,, certain needs may be reduced in priority. State the reduced priority needs and those constraints which keep the priority low.

Information:

Selection of Projects

Survey Item and Information

How many and what percentage of the proposals for projects designed to meet the program objectives were from the following organizations or agencies:

Agencies	Percent of Total Proposals Submitted		Percent of Total Proposals Funded	
	No.	%	No.	%
Universities				
Local education agencies				
Community or junior college				
Private R & D agencies				
State education agencies				
Other (Specify)				

Survey Time and Information

List the steps used to review proposals for Personnel Development Projects.

Steps in the Review	People Involved (Title and/or Function)

Survey Item and Information

Check the criteria used over the total process of screening proposals (Section II) and rank in order of importance (Section III) (1 being the most important).

NOTE: If criteria varies by program objectives, reproduce chart for each objective.

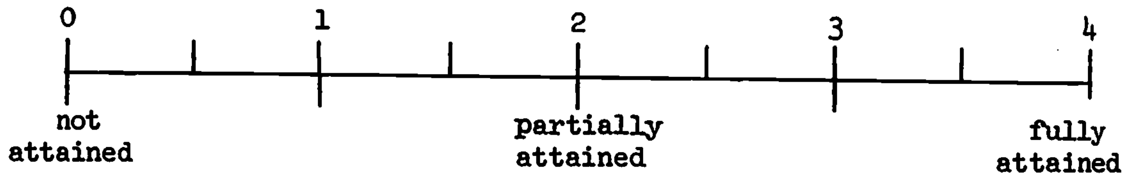
SECTION I	SECTION II	SECTION III
Screening Criteria	Criteria Used	Rank
Relationship to state program objectives		
Estimated cost of proposal project		
Number of students (participants) involved		
Students (from participant's school or agency) for whom the project is aimed		
Past record of institution or agency (success with previous projects)		
Proposed project duration		
Feasibility of projects		
Ability and availability of personnel		
Other criteria used (Specify)		

II. QUESTIONS AND INSTRUCTIONS

Underlined headings are used to designate the pages in Section I of Aid for Interpreting Data where data to which the questions and instructions refer. The pages which follow may be removed so that the questions and instructions may be viewed next to the information in Section I to which they relate.

A-1

1. Based upon the evidence presented rate each of the state program objectives according to the scale which follows.



2. For each objective, state the reasons for the rating given.

3. Refer to information on the state needs for personnel development (C-1, ff.) Are the objectives consistent with those needs?

4. What are the major assets which contributed to attainment of objectives?

5. What were the major obstacles to the attainment of objectives?

6. Are objectives stated as behavioral objectives? (see the Guideline for Developing Behavioral Objectives). How can objectives which are not behavioral objectives be improved?

7. Is there additional information to determine the attainment of objectives? If so, what information?

8. What conclusions about the state personnel development program can be drawn?

A-2

1. Is there justification for the projects which do not address program objectives?

2. What conclusions can be drawn from the data?

B-2 through B-15

The paragraphs which follow are designated: (1) analysis, (2) cautions, (3) conclusions, and (4) individual projects. They include instructions to assist SET members in analyzing and reaching conclusions, as well as cautions which should be observed in interpreting the data.

Analysis, Cautions, and Conclusions: Tables 1-14

1. Analysis:
   (a) For each level of a table (i.e., each horizontal row), compare the percentage of favorable and unfavorable participant ratings. For Tables with Yes-No or Yes-Partly-No ratings, simply compare the percentage of Yes to the percentage of No responses. For Tables with a Worthwhile rating, compare the sum of the very and fairly worthwhile ratings to the sum of not very worthwhile and waste of time ratings. For Table 9, compare the sum of the Great and Some percentages to the No percentage.

   (b) For Tables 1, 3, 5, 6, and 7, does any extreme percentage (i.e., completely worthwhile and not worthwhile) seem large enough or small enough to bear mentioning? For Tables 6, 13, and 14, does the percentage of Great responses seem large enough or small enough to bear mentioning? Report these percentages and the level of each percentage.

   (c) For Tables 1-4 and 8-12, refer to the survey forms with raw data. Read through the comments under the question that relates to a table. For example, on Table 1 read through the comments on the participant survey form under "How Worthwhile was the Project?" List comments that you feel are significant, if any.

   (d) For Table 5, under each activity, look at the percentage of participants who said the activity is not used but needed. Does any percentage seem large enough to bear mentioning?

   (e) For Table 6, look at the percentage of participants. For age and for ethnic group, does any percentage stand our as very high or very low? For sex, does either sex have many more participants than the other? Report any significant percentage and the group characteristics associated with it.

2. Cautions:
   (a) For all tables except Table 5, does the percentage of No responses for each level seem high enough to make interpretations of that level difficult? For Table 5, does the sum of the last three percentages of each level seem high enough to make an interpretation of the level difficult? For Tables 1-4 and 8-12, does the percentage of No responses for

the "All Projects" level seem high enough to make an interpretation of the entire table difficult? Report all levels or tables that seem difficult to interpret and the percentage of No responses of each.

(b) For all tables except Table 5, does the number of participants for each level seem low enough to make an interpretation of that level difficult? Report the levels that seem difficult to interpret and the number of participants in each. (Question 3 refers to the situation where there are no participants in a level; do not refer to that situation here). For Table 6, is the number of participants who did not identify their ethnic group high enough to make an interpretation of ethnic groups difficult? Report this number and the percentage; if too high, do not interpret ethnic group data at all.

(c) For those tables with a Yes-Partly-No rating, does the percentage of Partly responses seem so high that a comparison of favorable to unfavorable for a particular level seem difficult? If so, report the level and the percentage of Partly responses.

3. Conclusions:

Base your conclusions on the data examined in 1 above. Keep in mind the cautions brought out in number 2. Because of the cautions, you may decide not to include a certain level in your conclusions or not to make conclusions at all. You may want to comment on decisions you make. If a level has no participants, this level will be excluded from your conclusions, unless you have a comment about it. You may notify any of these instructions or you may organize your conclusions differently if you feel such changes are best for the program you are evaluating. For Tables 1-4 and 8-12, make conclusions about:

(a) participant or supervisor views over all projects
(b) participant or supervisor views according to the size of projects
(c) participants or supervisor views according to the duration of projects
(d) participant or supervisor comments that were not brought out in a, b, or c.
(e) any other aspect of the data.

For Table 5, make conclusions about:

(a) participant views of the worthwhileness of each activity
(b) participant views of the need for each unused activity, if there are sufficient data
(c) any other aspects of the data.

For Tables 6, 7, 13, and 14, make conclusions about:

(a) participant or supervisor views under each of the two questions, according to each characteristic. (For example, in Table 6, participant views of worthwhileness and applicability, according to age, sex, and ethnic group).

(b) For only Table 6, the distribution of participants by age, by sex, and by ethnic group.

(c) Any other aspect of the data.

4. Individual Projects:

If Tables for individual projects are examined, do any of the projects seem very much different from the rest, either positively or negatively? Identify these projects, with supporting data. From the answer to this question, does it seem that your conclusions about the state program are effected equally by all projects or predominantly by a few.

B-16

1. What responses were most common?

2. How do the responses to this item compare with the information in Tables 1 and 2 (pp. B-2, B-3) which show the reactions of participants to "How Worthwhile was the Project?" and "Did the project apply to Work?"

3. What conclusions can be drawn from the information and a comparison with other data from participants?

B-17

1. What responses were most common?

2. How do the responses to this item compare with the information in Tables 1 and 2 (pp. B-2, B-3) which show the reactions of participants to "How Worthwhile was the Project?" and "Did the Project Apply to Work?"

3. What conclusions can be drawn from the information and a comparison of it with the other data from participants?

C-1

1. What methods were used to determine the personnel development needs?
2. What method was rated as most important?
3. How many persons were consulted?
4. In your opinion, were there other means which might have been used to determine personnel development needs?
5. Was the process used to determine needs consistent with the procedures set forth in the state plan for vocational education?
6. What conclusions can be drawn?

C-2

1. What were the most important criteria for setting the priority of needs?
2. In your opinion could other criteria be considered in developing the priority of needs?
3. Are there adequate resources for the higher priority needs?
4. Is the list of priorities consistent with the objectives for personnel development in the state plan?
5. What conclusions can be drawn from the data?

C-3

1. What were the major constraints which caused priorities to be lowered?
2. What conclusions can be drawn from the data?

D-1

1. From which agencies were proposals submitted?
2. What type of agency submitted the largest percentage of proposals?
3. What type of agency had the largest number funded?

4. Are there other types of agencies from which proposals might have been solicited?

5. What conclusions can be drawn from the data?

D-2

1. In your opinion were the procedures used to select proposals open and flexible?

2. Might others have been used?

3. What conclusions can be drawn?

D-3

1. Which criteria were most important in screening proposals for personnel development projects?

2. In your opinion, are there additional criteria which might be used to screen proposals?

3. Was the screening process consistent with state objectives?

4. What conclusions can be drawn?

A MODEL TO EVALUATE
PERSONNEL DEVELOPMENT IN
VOCATIONAL-TECHNICAL EDUCATION

Guidelines for Developing
Behavioral Objectives

Warren L. Lasell
Richard P. Coatney
Ronald D. Daugherty

Draft for Pilot Test
January 15, 1972

The purpose of this section is to present (1) a definition of behavioral objectives, (2) guidelines to develop behavioral objectives, (3) examples of behavioral objectives, and (4) a suggestion to aid in writing difficult objectives.*

Definition of a Behavioral Objective

A behavioral objective is a statement which describes what a person or group of people will be able to do after completing a particular kind of instruction. It specifies: (1) the instruction, (2) the behavior or behaviors that are to result from that instruction, and (3) the criterion level the behavior must reach. Behavior is defined here as any human activity that can be observed by another and can be either measured or judged.

Guidelines for the Development of Behavioral Objectives

To facilitate writing behavioral objectives, it is best to divide each into its five components. An example of a behavioral objective and its five components is given below.

The behavioral objective:

> By fiscal year 1975, state coordinators of personnel development and project directors who use this evaluation model will develop and use behavioral objectives, with the five components of each objective, for at least 50 percent of their objectives, as determined by state evaluation teams.

---

* Much of the material in this document is taken from Robert J. Kibler, Larry L. Barker, and David T. Miles, Behavioral Objectives and Instruction (Boston: Allyn and Bacon, Inc., 1970).

The five components:

(1) The person or persons who perform the desired behaviors (e.g., state coordinators of personnel development and project directors who use this evaluation model)

(2) The desired behavior (e.g., will develop and use)

(3) The result or product of the behavior which will be evaluated (e.g., behavioral objectives, with the five components of a behavioral objective)

(4) The relevant conditions under which the behavior is to occur (e.g., by fiscal year 1975)

(5) The standard which will be used to judge the result or product of the behavior (e.g., for at least 50 percent of their objectives, as determined by state evaluation teams)

After writing behavioral objectives, check to make sure that each objective includes the five components. To prevent excessive detail in objectives for state programs, few objectives, perhaps 10 or less, should be written.

The checklist and three examples of behavioral objectives which follow may aid persons writing objectives. The checklist can serve as a diagnostic tool to detect and correct errors in the behavioral objectives. Any negative answer indicates that an objective is not completely behavioral in terms of the definition presented here.

CHECK LIST

Criteria	YES	NO
1. Does each behavioral objectives emphasize a <u>verb</u> that requires action on the part of the student?		
2. Is each behavioral objective stated in terms of student performance (rather than teacher performance)? Does it describe what the learner will <u>do</u> when demonstrating this achievement of the objective?		
3. Is each behavioral objective stated so that it indicates <u>terminal behavior</u> (rather than subject matter to be covered during instruction)?		
4. Is each behavioral objective stated so that it includes only one learning <u>outcome</u> (rather than a combination of several outcomes)?		
5. Is there a sufficient number of behavioral objectives to adequately describe the desired achievement of the learners?		

<u>Examples of Behavioral Objectives</u>

The following behavioral objectives are divided into their components. The number above each component refers to its numbered explanation on page 2.

1.
4
After inservice training or independent study, |
1
all elementary and middle school teachers |
2
will use |
5
at least two |
3
career education concepts as a part of their curriculum, |
5
as judged by the State Division of Vocational Education. |

2. Every teacher at Metropolitan [1] Technical Institute | will present [2] | [4]
a five-minute lecture [3] | to nine of his peers on a topic [4] in his area |
and then privately view [2] | the lecture [3] | on video tape. [4] | He will
determine the success of his presentation [5] by completing a self-evaluation form. |

3. At a one-week seminar conducted by the Institute [4] on Group Relations, |
fifty community college vocational education [1] teachers within the state |
will acquire | information about the culture of [3] and problems encountered
by Blacks and Mexican-Americans. | Attendance to every session and a
score of at least 70 percent on a test [5] devised by the instructors of
the seminar will be accepted as successful completion of the seminar. |

Difficult Objectives

Many times it is easier to write about behavioral objectives than to develop and use them in a practical situation. Kibler, Barker, and Miles offer the following advice for writing difficult objectives.

Several types of extremely important objectives are difficult to measure and thus, difficult to specify in behavioral terms. As a matter of fact, it seems that the more significant an objective, the more difficult it is to measure. Examples of objectives which fall into the difficult-to-specify-and-measure category are those in the area of problem-solving, creativity, attitudes, and values. The only solution we see to this problem is for such objectives to be specified as clearly as possible and for the instructor to be as resourceful as he can in developing evaluative measures . . .

[p. 5]

Suggested References for Writing Behavioral Objectives

Kibler, Robert J.; Barker, Larry L., and Miles, David T. Behavioral Objectives and Instruction. Boston: Allyn and Bacon, Inc., 1970.

. . . .

Armstrong, Robert J.; Cornell, Terry D.; Kroner, Robert E., and Roberson, E. Wayne, eds. A Systematic Approach to Developing A Handbook Designed to Increase the Communication of Laymen and Educators. Tucson, Arizona: Educational Innovators Press, Inc., 1968.

Gronlund, Norman E. Stating Behavioral Objectives for Classroom Instruction. New York: The MacMillan Company, 1970.

Hernandex, David E. Writing Behavioral Objectives. New York: Barnes and Noble, Inc., 1971.

Mager, Robert F. Preparing Instructional Objectives. Palo Alto, California: Fearon Publisher, 1962.

APPENDIX B

State Personnel Development Programs Visited
and Persons Involved in the Project
as Consultants or Reactors

States Visited

California

Florida

Georgia

Illinois

New Jersey

New York

Oregon

Washington

Advisory Committee of State Directors of Vocational Education

Neal Andrew, New Hampshire

Ernest Kramer, Washington

Charles Law, North Carolina

Jack Michie, Michigan

George Mulling, Georgia

Joseph Murphy, Connecticut

John Snyder, Kansas

Francis Tuttle, Oklahoma

Teacher Educators in Vocational Education

Carl Bartell, Arizona State University

Bernard T. Fagan, University of Kentucky

Roger Haskill, Florida State University

Cas Heilman, Oregon State University

George O'Kelly, University of Georgia

Gordon Swanson, University of Minnesota

Other Persons Asked to React to the Model

Garry Bice, University of Tennessee

Wayne Courtney, Stout State University

Elaine House, Rutgers University

H. C, Kazansas, University of Missouri

Mel Miller, Oregon State University

Consultants Used in the Project

Conceptual Stage

Glenn Immegart, Professor, Department of Educational Administration, University of Rochester

Robert Lange, Assistant Professor, Academic Faculty of Educational Development, The Ohio State University

Review Stage

Glenn Immegart

Robert Lange

John Struct, Director of Vocational Education, Pennsylvania